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Humboldt meets Schumpeter?

**Interpreting the 'Entrepreneurial Turn' in
European Higher Education**

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Interpreting the ‘Entrepreneurial Turn’ in European Higher Education

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Abstract

Universities are increasingly pressurized to respond to external imperatives and demands, while, at the same time, being expected to enhance both their efficiency and accountability. This is leading to the local adoption of key, structural and cultural features associated with the model or global script of the entrepreneurial university. This chapter undertakes a critical analysis of the premises associated with the latter model, and provides new insights on the sustainability of the “entrepreneurial turn in higher education” against the backdrop of the challenges facing European universities.

1. INTRODUCTION

In Europe, there is increasing interest, amongst policy and scholarly circles, in the role of the university in the economy/society (Conceição et al. 1998; Temple 2011). The traditional notion of university systems as relatively *de-coupled* from external events and dynamics (Birnbaum 1988; Clark 1983) has gradually been replaced by increasing external expectations for addressing the demands of various stakeholders (Benneworth and Jongbloed 2010). Against the backdrop of the competitive challenges brought by the rise of a knowledge-based economy, there has been a new impetus towards modernizing universities (Maassen 2009; Olsen and Maassen 2007; Turunen 2009). There are those who argue that universities are fundamentally being transformed as they adopt new organizational models enabling them to become more responsive to local, national and global events (Ramirez 2010; Whitley 2008). Krücken et al. (2007: 40), amongst others, contend that under these new operational conditions, “the university is elaborately linked to society, with society entering in and the university extending outward.”

The aim for this chapter is twofold. First, it will take stock of the phenomenon associated with the rise of entrepreneurialism in higher education. And second, it will cast critical light

on the sustainability of the entrepreneurial university model, as presented in the existing literature, as a means of resolving the tensions or dilemmas facing contemporary European universities.

The chapter is organized around five main sections. Following the introduction, section two revisits the “classic” notion of the multiversity. It then moves to cast light on the rise of entrepreneurialism in European higher education. Section four illuminates a set of inter-related dilemmas facing universities¹, and discusses them in light of the entrepreneurial model. Finally, section five concludes the chapter by suggesting possible avenues for future research.

2. THE MULTIVERSITY, REVISITED

The term *multiversity* (Kerr 2001) has often been used in order to characterize the ‘ambiguity of purpose’ and internal complexity inherent to the modern university (cf. Pinheiro, 2012a). Writing in the early 1960s, Clark Kerr drew attention to the emergence of a new social phenomenon embodied in a new kind of university, characterized by its pluralistic orientation. According to Kerr, a multiversity differs from the classic conception of the university since it is characterized by a multiplicity of *purposes* and *centers of power*, in addition to serving a variety of clienteles (2001: 103). One of Kerr’s original aims was to call attention towards the fact that what had once been a *community* (of like-minded individuals) was now more like a city, a “city of infinite variety” (p. 102).

Krücken et al. (2007) contend that Kerr’s notion of the multiversity challenged the classic 19th century “idea of the university” promulgated by either Wilhelm von Humboldt (Nybohm 2003) or Cardinal Newman (Newman 1999). Inspired on the humanistic tradition, the former conceived of the university as a place for character formation and self-cultivation

¹ It is worth noting that there are significant differences amongst universities across Europe, aligned with the historical models being adopted. Some (Central and Southern Europe) followed the Napoleonic model, with its emphasis on general education and the separation of teaching and research. Others (Northern Europe) adopted key features emanating from the Humboldtian model of university, centered on the teaching-research nexus and considerable academic autonomy. In the UK and Ireland, the influence of Newman meant that increasing focus was attributed to the transmission of knowledge (teaching) and liberal education. The North American university is characterized by the seeming combination of the aforementioned features (latter two models) combined with the pragmatic character of American society, including its outreach mission (consult Ridder-Symoens 2003; Rüegg 2004; Jencks and Riesman 2002).

(*Bildung*), with a strong emphasis given to the teaching-research nexus and the degree of autonomy enjoyed by the academic staff. In contrast, Newman conceived of the core function of the university as being the *transmission* (rather than the advancement) of universal knowledge.

Following the lines of neo-institutional theory (Powell and DiMaggio 1991), Krücken and colleagues contend that whereas Kerr's multiversity was embedded on the contextual circumstances facing North American research universities (c.f. Geiger 2009), nowadays we are assisting to a worldwide trend towards the multiversity phenomenon. This, they argue, is being shaped by *globalization* trends in higher education which are resulting in the transformation of national higher education systems and individual institutions alike (King et al. 2011; Marginson et al. 2011). Yet, contrary to what is advocated by proponents of world society theory (Drori et al. 2006; Meyer et al. 2007) suggesting the widespread adoption of a universal template leading to *homogenization*, Krücken et al. take into account variations resulting from the local adaptation or "translation" in light of contextual circumstances (Czarniawska-Joerges and Sevón 2005; Gornitzka and Maassen 2011; Pinheiro and Stensaker 2013).

The 'new multiversity' emerges because universities all over the world devise diverse solutions in the face of global trends that may appear standard, but that are never standardized in their effects, as they are *adapted, incorporated or resisted* by universities that are ultimately rooted in particular times and places. (Krücken et al. 2007: 8; emphasis added)

Studies from Europe suggest that even in highly regulated binary higher education systems, where particular missions are allocated to specific types of higher education providers, there is a general ("natural") tendency for all institutions to take on a multiplicity of functions or missions (Kyvik 2009; Kyvik and Lepori 2010; Taylor et al. 2008). This basically means that there is an inherent tension – which has not yet been adequately addressed in the literature - between convergence towards a specific universal template which is ahistorical in nature (Ramirez et al. 2014), and the need to develop a distinctive institutional profile and/or identity that takes into consideration historical trajectories (Krücken 2003)

and institutionalized or taken for granted local norms, values and traditions (Pinheiro et al. 2012a).

3. THE ENTREPRENEURIAL TURN IN EUROPEAN HIGHER EDUCATION?

The first academic reference to entrepreneurialism in higher education dates back to the early 1980s when Henry Etzkowitz, an American sociologist, published an article about entrepreneurial orientations amongst North American scientists and universities (Etzkowitz 1983). It focused on the commercialization of research findings and the apparent shift, in US academe, from conceiving of science as a *public good* to be enjoyed by many towards that of a *private commodity* to be exploited by a few. Etzkowitz's insightful accounts point to financial stringencies as the primary driver for the adoption of entrepreneurial endeavors amongst US academics. Yet, the author goes one step further by suggesting that something else is at stake, namely; a fundamental shift in traditional academic postures and values, a thesis that was corroborated by subsequent inquiries (Gumport 2000; Slaughter and Leslie 1997; Slaughter and Rhoades 2004). What is more, Etzkowitz attributes this change in the *scientific ethos* (Merton 1979) of North American academics to the endogenous nature of scientific work, particularly around the development of team- and result- oriented research.

In some respects, research groups in universities have become "quasi-firms", continuously operating entities with corresponding administrative arrangements and directors of serious investigations responsible for obtaining the financial resources needed for the survival of the research group. The specialisation of labour in scientific research, the increasing use of highly specialised and complicated equipment, the pressure to produce results quickly to ensure recognition and continued financial provision have changed certain aspects of scientific activity. (Etzkowitz 1983: 199)

A recent (June 9, 2014) google search on the term 'entrepreneurial university' delivered 26.6 million hits; 703 thousand in google-scholar. Similarly, ISI's Web of Knowledge identified a total of 108 scientific articles with the term in the title in the 30-year period 1982-2011. Whereas the average number of articles in 1990 and 2000 was two, by 2011 this figure had increased eightfold. The average annual number of citations in the last 30 years was 36, with the seminal work by Etzkowitz leading the way with close to half of all citations (Etzkowitz 1998; Etzkowitz 2003; Etzkowitz et al. 2000). By far, the single most cited title relates to the future of the university and pertains to the evolution from 'ivory tower' to the

‘entrepreneurial paradigm’ (Etzkowitz et al. 2000). Here, Etzkowitz and colleagues refer to the famous “triple helix” of university-industry-government relations as illustrative of the types of mutually reinforcing and beneficial relationships amongst public and private sectors within the context of a knowledge-based society (see also Etzkowitz 2008).² On the basis of empirical evidence from *four* continents the authors conclude that:

It appears that the ‘entrepreneurial university’³ is a global phenomenon with an isomorphic developmental path, despite different starting points and modes of expression.” (Etzkowitz et al. 2000: 313; see also Etzkowitz et al. 2008)

The first traced publication referring to entrepreneurial behavior at a European university dates back to the early 1990s when Maassen and van Buchem (1990) described how the leadership structures at the University of Twente in the Netherlands turned an institutional crisis into a strategic opportunity. The result was the reinvention of a relatively marginalized regional university into a dynamic and innovative academic establishment. Such “success cases” were later popularized by Clark (1998) whilst describing how a group of mid-size European universities located in relatively peripheral geographies were able to overcome institutional constraints and paralysis.

Pushed and pulled by enlarging, interacting streams of demand, universities are pressured to change their curricula, alter their faculties, and modernize their increasingly expensive physical plant and equipment – and to do so more rapidly than ever [...] In traditional European settings, enterprising universities are places that actively seek to move away from close governmental regulation and sector standardization. They search for special organizational identities; they risk being different; they take chances in the ‘market’. They adhere to the belief that the risks of experimental change in the character of universities should be chosen over the risks of simply maintaining traditional forms and practices.” (Clark 1998: xiv)

Clark’s investigations reveal *five* distinctive features characterizing entrepreneurial behavior amongst academic institutions throughout the “old” Continent, namely:

- A strengthened *steering core*; substantiated on strong leadership structures at both the central and sub-unit levels;

² The triple helix has been the target of major critic, inter alia, for paying little attention to national contexts and other social settings (Balzat and Hanusch 2004; Cooke 2005; cited by Cai and Liu 2014: 1)

³ Consult Mora and Vieira (2009: 82) for definitions of entrepreneurial university in a strict- and broad- sense.

- An *expanded developmental periphery*; linking-up with external organizations and groups (partnerships);
- A *diversified funding base*; reducing the financial reliance from government;
- A *stimulated academic heartland*; with actors at the level of the various sub-units receptive towards a new set of values and enterprising orientations;
- And finally, an *integrated entrepreneurial culture* acting as the basis for a distinct organizational identity and market reputation (Clark 1998: 137-44).⁴

More importantly, Clark warns against the idealization of one particular feature while referring for the need to approach the university as a *system* (consult Birnbaum 1988) by paying close attention to the transformative synergies emerging out of the interaction amongst the above (five) elements. In his sequel, titled “Sustaining Change”, where the analysis is expanded beyond the European Continent, Clark (2004) concludes:

The key seems to lie in *mutually supportive interaction* among the elements. As interaction becomes institutionalized, producing a new ‘natural’ state of affairs, the university acquires a steady state that presses for continuing change. New combinations of interest groups take the stage; new sunk costs become embedded. The changed organization is both stable and mutable. (Clark 2004: 47-8; emphasis added)

Following Clark, a number of other social scientists have attempted to empirically operationalize the notion of entrepreneurialism in higher education. For example, Benneworth (2007) shows how, in England, the construction of Newcastle as an entrepreneurial university encompassed bringing a group of outsiders in order to initiate and stimulate changes in an organizational culture that was seen as *risk-averse* and *dysfunctional*, albeit the presence of some entrepreneurial capabilities across the academic heartland. Similarly, Pinheiro and Stensaker (2013) take stock of the structural and cultural

⁴ It could be argued that, to a certain degree, Clark’s core dimensions are rather arbitrary and that they do not necessarily reflect the current dynamics across most European (and US) universities where: the bulk of funds still emanate from the public purse; the central administration (strategy) is still rather decoupled from the real life of academic units; and that the periphery is increasingly becoming an integral part of the core – or at least it exercises a negative influence on core tasks, e.g. as regards research priorities, cultural fragmentation, etc. (Slaughter 2014; private conversations). What is more, Clark’s “successful” European case studies were carefully selected in the light of the aforementioned features, and in a number of circumstances universities became entrepreneurial due to the lack of viable alternatives (Stensaker and Benner 2013). That said, it is undeniable that Clark’s insights have had considerable influence amongst institutional managers and scholars alike when it comes to filling the abstract notion of the entrepreneurial university with meaningful content, not least as an aid to strategic agency (cf. Pinheiro and Stensaker 2013).

changes set in motion by central leadership structures within universities in Northern Europe, shedding light on processes of localization or *adaptation* of the global model of the entrepreneurial university (see also, De Carolis 2014; Ferreira et al. 2006; Gibb et al. 2013; Mok 2013; Nelles and Vorley 2008; Shattock 2009; Van Looy et al. 2004; Vorley and Nelles 2012).

Scholars have also started to shed light on the potential impediments to university entrepreneurialism. These include: (a) *legal barriers*, like the civil servant status of academics; (b) *mental barriers*, associated with conservatism, groupthink and the ‘traditional’ ivory tower syndrome; (c) *resource constraints*, such as the lack of personal incentives; and (d) bottlenecks associated with problems of *assessment and measurement*, with entrepreneurialism often conceived as a “moving target” (Lambert (2009: 149-50).

While investigating developments across the European continent in the period 1994-2004, Shattock (2009) reveals that the gradual movement towards the entrepreneurial model at state-funded universities in countries like Russia, Poland, Sweden, Spain, and the UK, is part and parcel of significant changes in the institutional and technical environments in which universities operate, particularly at the domestic level. Amongst other things, it is concluded that full institutional autonomy (consult Schmidtlein and Berdahl 2005) is a *necessary* condition for universities to become entrepreneurial, yet not a *sufficient* one. Furthermore, this rather comprehensive comparative study contends that:

Universities become entrepreneurial for a variety of different reasons – dynamic leadership, financial shocks to the system, a sense of regional isolation, a response to local economic pressures, or the leverage exercised by certain kinds of funding systems. But it remains the case that the bottom-up drive of individual ‘academic intrapreneurs’ also represents a key factor in motivating institutional entrepreneurialism. An institution may not be entrepreneurial overall but may have distinctive entrepreneurial enterprises within it. (Shattock 2009: 204)

4. DISCUSSION: HOW SUSTAINABLE IS THE ENTREPRENEURIAL UNIVERSITY MODEL?

Studies from various corners of the world suggest that a process of *convergence*, by this it is not meant *homogenization*⁵, is currently under way (Etzkowitz et al. 2008; Shattock 2009; Temple 2011), illustrated by the gradual but steady move towards the entrepreneurial model by “classic”, research-intensive universities (Geiger and Sá 2008; Lawton Smith and Ho 2006; Mohrman et al. 2008; Powell and Owen-Smith 2002). Mohrman et al. (2008) shed light on the above phenomenon whilst referring to the so-called *Emergent Global Model* (EMG) of the research-intensive university in the 21st century. The former is characterized by a number of key features that, until recently, have been strongly associated with more innovative or entrepreneurial academic entities, namely; a diversified funding-base (Clark 1998) and new relationships with external actors across public and private sectors (Etzkowitz and Leydesdorff 2000) as well as the larger surrounding community (Benneworth 2013; Soska and Butterfield 2005). A number of studies have described how national research universities are both *adopting* and *adapting* key features associated with entrepreneurial universities in light of their unique historical trajectories and specific circumstances (Beerkens 2010; Mohrman 2008; Mok 2013; Pinheiro and Stensaker 2013), thus suggesting that path-dependencies (Krücken 2003) as well as context (Kehm and Stensaker 2009) do matter.

These developments suggest that the entrepreneurial model is increasingly seen as a legitimate template (Deephouse and Suchman 2008) for organizing activities across the *organizational field* of higher education (c.f. Kyvik 2009). Having said that, we would argue that the entrepreneurial model, as is presented in the literature, is far from being a solution for all the problems facing modern universities in Europe or elsewhere (see Baker and Lenhardt 2008; Brint 2002; Ritzen 2010). The adoption of selected entrepreneurial features by universities the world over has indeed the potential for addressing a number of pending problems, for example when it comes to *resource dependencies* (Pfeffer and Salancik 2003) associated with the scarcity of funding (see Lepori et al. 2007). Yet, at the same time, we

⁵ As aluded to earlier, it is in this respect that neo-institutionalism perspectives on the rise of the entrepreneurial university across the world are short-sighted, since, as it will be demonstrated here, the local adoption of key features associated with the former model has a tendency to foster rather than constrain heterogeneity, i.e. they result into *polymorphic* rather than *isomorphic* tendencies.

contend that the adoption/adaptation of entrepreneurial features at the levels of central *steering core* and *academic heartland* (Clark 1998) may result into new internal tensions and dilemmas given the distinctive structural and cultural features characterizing the university both as an organizational form (Musselin 2007) and rather autonomous social or *fiduciary* institution (Maassen and Olsen 2007; see also Pinheiro et al. 2012a).

Given this, and inspired by an earlier analysis undertaken by Norwegian political scientist Johan P. Olsen (2007) we conceive of the sustainability of the entrepreneurial paradigm in higher education has being intrinsically dependent upon its ability to help solve *four* main tensions or dilemmas that lie at the heart of the modern European university. Each one of these tensions is linked to what is considered to be a critical element defining the university both as a functional way of organizing academic work (Clark 1983) as well as a set of rules – both formal and informal - affecting the behavior of its participants, particularly academic communities (March and Olsen 2006b; Merton 1973), namely: (a) historical trajectories and institutional legacies; (b) resource-dependencies and the degree of external control; (c) formalized structures, work arrangements and power allocation; and (d) institutional character and integrity, linked to the notion of a distinctive organizational- culture and identity. The successful resolution of the aforementioned dilemmas can best be described around the desire – by university managers - for achieving a balance between the following dilemmas:

- *Change or self-renewal vs. continuity or stability*; as related to path-dependencies and institutional legacies (Pinheiro 2012c; Tapper and Palfreyman 2011);
- *Public vs. private (for-profit) knowledge regimes*; as associated with resource dependencies and the degree of external control (Covaleski and Dirsmith 1988; Slaughter and Cantwell 2012);
- *Unity of action vs. individual freedom*; linked to formalized structures, work arrangements and the power re-distribution (Pinheiro and Stensaker 2013; Ramirez 2010);
- *Unity of purpose vs. multiple identities and accounts*; as pertaining to a shared sense of identity (Fumasoli et al. 2012; Stensaker 2014).

Below, we explore, briefly, each one of these tensions or dilemmas in more detail.

4.1. Change vs. Continuity

As is the case with other social institutions, higher education systems in general and universities in particular require a certain degree of continuity while simultaneously adapting and responding to emerging demands emanating either from the inside or the outside (Rothblatt and Wittrock 1993; Tapper and Palfreyman 2011). Ongoing attempts at transforming the university into an “organizational actor”, i.e. a rationally-design entity capable of defining a course of action (around strategic goals) and of being accountable for its own behavior (Krücken and Meier 2006; Whitley 2008), not least to external stakeholders like funders (Benneworth and Jongbloed 2010), are likely to encounter resistance by the academic heartland when such “modernizing” efforts are perceived, rightly or wrongly, as threatening deeply-entrenched and widely shared values, norms, identities and behavioral postures. These latter dimensions are intrinsically associated with the notion of the university as an autonomous *institution* characterized by a life of its own (Olsen 2007; Trow 1970). Institutional scholars remind us that institutions – i.e. formal and informal rules affecting the behavior and actions of social participants - are defended by *insiders* and validated by *outsiders*, and that since “their histories are encoded into rules and routines, their internal structures and rules cannot be changed arbitrarily.” (March and Olsen 2006a: 7)

In his seminal studies of entrepreneurial universities in Europe and beyond, Clark (1998, 2004) concludes that a key *success factor* is the direct involvement of the academic heartland in processes of internal change and self-renewal, with reform processes driven from the ‘top-down’ (by the central steering core) lacking the consent of academics facing the danger of being rejected or ignored (see also Gornitzka 1999; Oliver 1991; Tuchman's chapter, this volume). While referring to one of his European case studies, the Chalmers University of Technology in Sweden, Clark states that:

The *idea* that the institution should become an entrepreneurial place was openly and strongly voiced in both the *academic heartland* and the central part of the *steering core* as early as 1980, when the campus's leading professor, backed by the rector and the administrative director, announced his total devotion to ‘innovation’ and started up an Innovation Center, a step that led in time to the building of a multi-sided extensive development periphery. (Clark 2004: 61; emphasis added)

A distinctive feature of the entrepreneurial paradigm lies on the re-allocation of formal power and authority from individual academics, as it used to be the case across most European countries (Clark 1983), to leadership structures or *steering core* at both the central and sub-unit levels (Clark 1998: 5-6; de Boer and Goedegebuure 2009). This factor alone tends to exacerbate existing internal tensions and volitions, particularly when the members composing the academic heartland subscribe to the idea or *vision* of the university as a 'representative democracy' (de Boer and Stensaker 2007; Tapper and Palfreyman 2010). Even in national systems characterized by strong hierarchical arrangements or power asymmetries, as is the case of Southern Europe, academic audiences are reacting negatively to ongoing attempts aimed at centralizing decision making procedures and at making the university more like a "normal" organization akin to the managerial structures found in firms (Santiago and Carvalho 2008). This new state of affairs – which is laden with tensions and contradictions (Santiago et al. 2006) - is characterized by attempts at devising a clear "chain of command" with academics seen as *implementers* rather than the *architects* of long-term strategic decisions affecting their individual sub-units and/or the university as a whole (for a recent account, see Pinheiro 2012a).

4.2. Public vs. private knowledge regimes

In the literature, entrepreneurial universities are often characterized by their willingness to engage with a wide variety of external actors, many of whom have the commodification or commercialization of knowledge as the leitmotiv for engaging with academe (Geiger and Sá 2008; Powell and Owen-Smith 2002). The institutionalization of a "spirit of entrepreneurship" across the board (Clark 1998; Etzkowitz 2001) implies that academics themselves are now expected to take pro-active efforts in the economic exploitation of knowledge (Slaughter and Leslie 1997). Given the traditional public orientation of academic systems in Europe (and most other countries as well), this transition is giving rise to new internal tensions and volitions (Benneworth et al. 2014; Marton 2005; Pinheiro et al. 2012b).

Despite vast evidence – from Europe and beyond - suggesting that academic communities are increasingly willing to engage with external actors like industry (for a recent review consult Perkmann et al. 2013), major concerns with respect to the commodification of university-generated knowledge remain (Pinheiro 2012a; Slaughter and Rhoades 2004). In

an essay titled “*Universities and Knowledge*”, as part of a broader discussion on the future of the university in North America, Gumpert (2002) sheds light on the clash of institutional logics (c.f. Thornton and Ocasio 2008) between the university as a *social institution* (multiplicity of goals and functions, traditional academic ideals, etc.) and *industry* (focus on resources, efficiency, competitiveness, etc.), and the worry that, over time, market forces will redefine public higher education as a *private* economic benefit rather than a *public* good (see also Deem 2001; Slaughter and Cantwell 2012; Slaughter and Leslie 1997; Slaughter and Rhoades 2004).

Studies from Northern Europe report that the normative boundaries of the university seem to be in tremendous flux. Yet, this does not necessarily imply that academics have fully embraced the “logic of the marketplace”, at least as far as the production and transmission of knowledge is concerned (Benner and Sandström 2000; Marton 2005); or that change processes are unproblematic per se (Pinheiro et al. 2014a; Weiler 2005). For example, Pinheiro (2012a, c) provides recent evidence suggesting that, in spite of increasing pressures for generating additional revenues, academic groups based at universities throughout Northern Europe, including those characterized by an institutionalized *entrepreneurial ethos*, still have some reservations when it comes to the commercial exploitation of academic-generated knowledge.

Undoubtedly, the entrepreneurial paradigm in higher education presents tremendous opportunities to re-balance external dependencies and to enhance the levels of autonomy and control over internal operations and activities (Pfeffer and Salancik 2003). That said, the emphasis placed on external dynamics and the shifting demands of various stakeholder groups pose a potential threat to both institutional- and individual- (scientific) autonomy (c.f. Schmidtlein and Berdahl 2005), thus increasing the risks of *co-optation* (Selznick 1966).

A challenge for the University is to balance between the Scylla of being seduced and the Charybdis of being abandoned and at the same time defend its identity and integrity. Potential contributors of funds, and the population at large, have to be convinced that it is worthwhile to support the University in the future. (Olsen 2007: 51)

Finally, the adoption of an entrepreneurial “label” (Huisman et al. 2002), even if only symbolically/rhetorically (see Meyer and Rowan 1977), often leads to the unfounded myth that financial support by external patrons is a mere formality.

4.3. Unity of Action versus Individual freedom

Clark (1983: 75) observes that, “under the steady pounding of larger scale, greater specialization, and multiplying complexity” higher education systems have a natural tendency for symbolic *disintegration*. Such developments have also been documented as occurring within universities themselves, to a large degree due to the *loosely-coupled* nature of their internal structures and activities (Birnbaum 1988). By fostering rationalization (Ramirez 2010) and centralization (Clark 1998), the entrepreneurial paradigm promises to enhance *task-integration* (coupling), thus, it is argued, increasing universities’ ability to more efficiently respond to emerging environmental demands (Etzkowitz et al. 2000). However, by doing so, two additional dilemmas come to the fore. The first pertains to the notion that individual freedom at the level of the academic heartland is, as a result, curtailed, e.g. around the choice of research topics. Recent studies across the Nordic region point to the rise of new internal tensions – across the heartland - resulting from the predominance of “strategic science regimes” (Rip 2004) driven by funding agencies and universities’ central steering cores (Pinheiro 2012a, c; see also Pinheiro et al. 2014a). (Pinheiro et al. 2014a) (Pinheiro et al. 2014a) (Pinheiro et al. 2014a) (Pinheiro et al. 2014a) (Pinheiro et al. 2014a) (Pinheiro et al. 2014a) (Pinheiro et al. 2014a) (Pinheiro et al. 2014a) (Pinheiro et al. 2014a) (Pinheiro et al. 2014a)

An additional dilemma relates to the assumption that enhanced structural integration through a *tighter coupling* amongst sub-units and their respective activities will automatically result into a faster speed of response to emerging (market) demands (Pinheiro et al. 2014b). Over the years, social science scholars, including higher education researchers (Birnbaum 1988; Hölttä and Karjalainen 1997), have suggested that *loose-coupling* is advantageous in situations characterized by increasing complexity and ambiguity as it allows different sub-units to sense their environments and respond accordingly, even if this means increasing the overall levels of *disintegration* across the board. Ironically, by strategically attempting to more closely integrate university structures and activities in

order to foster 'unity of action', universities' central steering cores may instead end-up *curtaining* rather than enhancing the ability of the organization as whole to more efficiently respond to unforeseen external events. This is related to the fact that loose coupling has the potential for increasing organizational redundancies or slack, and these are seen as critical in universities' abilities to respond to, and bounce back from, disruptive (internal and external) events and circumstances (Karksen and Pritchard 2013; Pinheiro et al. 2014b).

4.4. Unity of purpose versus multiple identities and accounts

It is widely acknowledged that universities are composed of a variety of *sub-cultures* (Becher and Trowler 2001; Clark 1983). One of the consequences is that, traditionally, it has been rather difficult to articulate, in concrete terms, what the core purposes or functions of universities really are (c.f. Castells 2001), with internal actors holding different (often conflicting) conceptions of what the role of the university and academics in society/economy ought to be (Benneworth and Jongbloed 2010), and, consequently, what types of internal activities shall be prioritized and financially supported (Rip 2004). One of the chief aims of the entrepreneurial model is to address this cultural fragmentation by attempting to create a sense of *common purpose* and *shared identity*. This is done by infusing a 'culture of entrepreneurialism' throughout the entire university, not least across sub-units composing the academic heartland.

Entrepreneurial universities become based on entrepreneurial departments – dynamic places attractive to faculty, students, and resource providers. (Clark 2004: 176)

In reality, however, this is easier said than done. A major dilemma pertains to substantial differences in knowledge structures (Pinheiro et al. 2012c) and the valorization of certain forms of knowledge by influential external stakeholders such as industry and funding agencies (Isaksen and Karlsen 2010). Earlier studies show that, generally speaking, an enterprising orientation tends to be easier to initiate and sustain amongst *harder* and more *applied* academic fields like science, technology and medicine when compared to the *softer* domains of the social sciences, the arts and the humanities (Owen-Smith et al. 2002; Powell and Owen-Smith 2002). Albeit the fact that such repositories of additional resources aid science (and the knowledge-based institutions like universities) more generally, such

situation also has the potential for creating “winners” and “losers,” further contributing to cultural fragmentation and, in the case of universities specialized in softer fields or located in the geographic periphery, institutional decline and marginalization (Nedeva 2007; Pinheiro 2013; see also Clark 1968).

Notwithstanding, an additional dilemma needs to be addressed by the central steering core. This is particularly the case for those universities rooted in national systems characterized by an institutionalized tradition or *ethos* of *egalitarianism*, as is the case of the Nordic countries (Gornitzka and Maassen 2011). Studies from Northern Europe (Pinheiro 2012a; Pinheiro 2012c; Pinheiro et al. 2014a) point to processes of local resistance and contestation around internal attempts, by the central steering core, at *de-institutionalizing* (Olsen 2010) a cultural tradition focusing on equality and cooperation amongst members composing the academic heartland and replacing it - *re-institutionalization* - with an internal ethos where meritocratic behavior and competition are to be celebrated and rewarded instead (see also Kwiek 2012; Trommel and van der Veen 1997: 61). Interestingly, such a phenomenon was also found to occur amongst academic groups associated with so-called “entrepreneurial universities” (Pinheiro 2012a).

The entrepreneurial paradigm in higher education poses yet another dilemma associated with the search for a distinct *organizational identity*. By adopting the entrepreneurial label, and sometimes the content as well, universities become associated with what is perceived as a relatively homogeneous group of institutions, not in the sense that their structures and activities are all alike, although this may occur due to isomorphic pressures (c.f. Morphey and Huisman 2002; Stensaker and Norgård 2001), but, regarding the fact that, as a group, they all are *enterprising*, *innovative* and *responsive* to the needs of their constituencies and stakeholder groups. In the short- to mid-run, this apparent similarity might deliver tangible benefits when it comes to securing external support or *legitimacy* (Deephouse and Suchman 2008) as well as in tapping into new sources of funding (Geiger and Sá 2008). Yet, in the long-haul, we would argue, it does not necessarily address a fundamental aspect of all organizations, i.e. the need that local participants have of being ascribed a distinct *role* and *identity* (Kondra and Hurst 2009; Ouchi and Wilkins 1985), and, in the process, of feeling that they are somewhat “special” when compared to their academic peers based elsewhere

(see Clark 1972; Clark 1992; Huisman et al. 2002; Pinheiro 2012b). In other words, the entrepreneurial university model seems, at best, to provide a partial solution to the dilemmas associated with the interplay between *mimetic isomorphism* (DiMaggio and Powell 1983) or the need “to be like the others”, and *polymorphic behavior* (Fleming and Lee 2009), substantiated around the natural urge for differentiation and a shared sense of distinct organizational identity (see also Fumasoli et al. 2012).

5. CONCLUSIVE THOUGHTS

The rise of the entrepreneurial paradigm in higher education, while tackling some solutions to traditional dilemmas associated with the lack of structural- and cultural- integration (Clark 1983), the multiplicity of goals and functions (Castells 2001), task-ambiguity (Musselin 2007), and resource stringencies and the allocation of funds (Covaleski and Dirsmith 1988), nonetheless leads to a new set of tensions and volitions intrinsically linked with the university as a distinct organizational form and relatively autonomous social institution (Olsen 2007; Pinheiro et al. 2012a) on the one hand, and to strategic imperatives like the need to survive/succeed in an increasingly volatile and competitive environment at the local, regional, national and international levels (Kehm and Stensaker 2009; Marginson 2004), on the other. Going back to the beginning of this essay, and the notion of the *multiversity* (Kerr 2001; Krücken et al. 2007), it is worth paraphrasing renown sociologist Manuel Castells who contends that:

The critical element in the structure and dynamics of university systems is their ability to combine and make compatible seemingly contradictory functions which have all constituted the system historically and are all probably being required at any given moment by the social interests underlying higher education policies. (Castells 2001: 211)

Whether the entrepreneurial university will be capable of resolving the tensions and dilemmas associated with conflicting functions, including but not limited to balancing local *relevance* with global *excellence* (Perry and May 2006), is undoubtedly an important topic to pursue in future empirical investigations within and beyond Europe. In this context, scholars from both sides of the Atlantic could cast empirical light on the ways in which the rise (and institutionalization) of entrepreneurialism in higher education is affecting internal structures, processes, functions, values and norms, as well as behavioral patterns and

academic identities. This could, for example, be done in the form of exploratory qualitative studies focusing on the ways in which, as a *global script* (Pinheiro and Stensaker 2013), the entrepreneurial university is being adopted, translated and adapted to specific local circumstances. And, in turn, researchers could take critical stock of observed variations in the light of historical trajectories and developmental paths, resource dependencies, geographic location, field-level dynamics like competition for students, staff and funding, etc.

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